

WHAT IS CLAIMED IS:

1. A method for forming a second access penetration in a wall of a body lumen having a first access penetration in said wall, said method comprising:

3 introducing a penetrating device inwardly through the first access  
4 penetration into the body lumen;

5 positioning a penetrating element of the penetrating device at a target site  
6 in the lumen; and

7 advancing the penetrating element outwardly through the wall of the  
8 lumen and overlying tissue to form the second access penetration.

1                           3.     A method as in claim 2, further comprising rotating the penetrating  
2 device to aim the penetrating element prior to pushing the penetrating device from the  
3 catheter.

5. A method as in claim 2, further comprising anchoring or stiffening at least a portion of the catheter as the penetrating device is pushed from the catheter.

1                   8.     A method as in any of claims 1 to 5, wherein the body lumen is a  
2     blood vessel.

1                   9.     A method as in claim 8, wherein the blood vessel is selected from  
2     the group consisting of arteries, veins, autologous grafts, artificial grafts, and arterio-  
3     venous fistulas.

1                   10.    A method for positioning a guidewire in a body lumen, said  
2     method comprising:

3                   positioning a guide tube between a first access penetration and a second  
4     access penetration into the body lumen;

5                   passing a guidewire through the guide tube, and

6                   withdrawing the guide tube to leave the guidewire in place.

1                   11.    A method as in claim 10, wherein the body lumen is a blood vessel.

1                   12.    A method as in claim 11, wherein the blood vessel is selected from  
2     the group consisting of arteries, veins, autologous grafts, artificial grafts, and arterio-  
3     venous fistulas.

1                   13.    A method as in any of claims 10 to 12, wherein positioning the  
2     guide tube comprises introducing a penetrating device comprising the guide tube and a  
3     penetrating element through the first access penetration, positioning the penetrating  
4     element of the penetrating device at a target site, advancing the penetrating element  
5     outwardly through the wall to form the second access penetration and position the guide  
6     tube therein, and withdraw the penetrating element from the guide tube to leave a lumen  
7     for receiving the guidewire.

1                   14.    A method as in claim 13, wherein positioning the guide tube  
2     further comprises introducing a catheter having a lumen therethrough to the target site  
3     and pushing the penetrating device from the catheter, wherein the penetrating element  
4     deflects laterally through the wall as it is advanced.

1                   15.    A method as in claim 14, further comprising rotating the  
2     penetrating device to aim the penetrating element prior to pushing the penetrating device  
3     from the catheter.

1                           16.     A method as in claim 15, further comprising anchoring or  
2     stiffening at least a portion of the catheter as the penetrating device is pushed from the  
3     catheter.

1                           18.     A method as in claim 17, wherein a second device is introduced  
2 over the guidewire simultaneously through the other of the access penetrations.

1 19. A method for intervening at a target site in a body lumen, said  
2 method comprising:

3 positioning a guidewire between a first access penetration and a second  
4 access penetration into the body lumen;

5 introducing a first device through the first access location over the  
6 guidewire to the target site;

7 introducing a second device through the second access location over the  
8 guidewire to the target site; and

9 intervening at the target site using at least one of the devices.

1 20. A method as in claim 19, wherein the body lumen is a blood vessel.

1                           21.    A method as in claim 20, wherein the blood vessel is selected from  
2    the group consisting of arteries, veins, autologous grafts, artificial grafts, and arterio-  
3    venous fistulas.

1                   25. A method as in claim 24, wherein intervening comprises deploying  
2 an occluding element from both of the devices to define an isolated region therebetween.

1                   26. A method as in claim 22, wherein intervening comprises disrupting  
2 material within the body lumen with one device and collecting the dislodged material  
3 with the other device.

1                   27. A method as in claim 19, wherein intervening at the target site  
2 comprises using at least one device to perform angioplasty, atherectomy, aspiration,  
3 filtering, infusion, mechanical thrombectomy, endarterectomy, luminal prosthesis  
4 placement, lysis, or thrombolysis.

1                   28. A method as in claim 19, wherein positioning the guidewire  
2 comprises:

3                   positioning a guide tube between the first access penetration and the  
4 second access penetration into the body lumen;

5                   passing the guidewire through the guide tube; and

6                   removing the guide tube to leave the guidewire in place.

1                   29. A method as in claim 28, wherein positioning the guide tube  
2 comprises introducing a penetrating device comprising the guide tube and a penetrating  
3 element through the first access penetration, positioning the penetrating element of the  
4 penetrating device at a target site, advancing the penetrating element outwardly through  
5 the wall to form the second access penetration and position the guide tube therein, and  
6 withdraw the penetrating element from the guide tube to leave a lumen for receiving the  
7 guidewire.

1                   30. A method as in claim 29, wherein positioning the guide tube  
2 further comprises introducing a catheter having a lumen therethrough to the target site  
3 and pushing the penetrating device from the catheter, wherein the penetrating element  
4 deflects laterally through the wall as it is advanced.

1                   31. A method as in claim 30, further comprising rotating the  
2 penetrating device to aim the penetrating element prior to pushing the penetrating device  
3 from the catheter.

32. A method as in claim 30, further comprising anchoring a distal end of the catheter as the penetrating device is pushed from the catheter.

34. A device as in claim 33, wherein the catheter has at least one lumen therethrough and the advancable means is reciprocatably received in the catheter lumen.

1                           35. A device as in claim 34, wherein the advancable means has a pre-  
2 formed tip which deflects laterally as it is advanced from the catheter.

1                           36.    A device as in any of claims 33 to 35, wherein the advancable  
2 means comprises a ~~guide tube~~ having a lumen therethrough and a penetrating element  
3 removable received in the lumen and extending from a distal tip of the ~~guide tube~~,  
4 wherein the penetrating means can be withdrawn from the ~~guide tube~~ after the ~~guide tube~~  
5 has been placed between the access penetrations to leave the ~~guide tube~~ lumen as the  
6 filament path.

37. A device as in claim 36, wherein the penetrating element is a stylet.

38. A device as in any of claims 33 to 35, further comprising an  
expandable anchor disposed over at least a portion of the catheter.

1 39. A device as in claim 36, further comprising a support tube having a  
2 lumen for receiving the guide tube therethrough.

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41. A kit comprising:  
a guide tube; and  
instructions for use according to any of claims 10 to 12.

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